

What is claimed is:

1. A temporary aqueous aerosol paint composition comprising:
an aqueous paint component comprising,
an aqueous solvent,
a polymeric resin,
at least one pigment compound,
at least one filler compound, and
an aqueous propellant component.
2. A composition as recited in claim 1 wherein said aqueous solvent comprises an amount of water.
3. A composition as recited in claim 1 wherein said aqueous solvent comprises an amount of filtered water.
4. A composition as recited in claim 3 wherein said amount of filtered water is filtered to remove chlorine.
5. A composition as recited in claim 3 wherein said amount of filtered water is filtered to remove iron.
6. A composition as recited in claim 3 wherein said amount of filtered water is filtered to remove chlorine ions.
7. A composition as recited in claim 3 wherein said amount of filtered water is filtered to remove iron ions.
8. A composition as recited in claim 1 wherein said polymeric resin comprises a polymeric compound dispersion.
9. A composition as recited in claim 1 wherein said polymeric resin comprises a polyvinyl acetate dispersion.
10. A composition as recited in claim 1 wherein said at least

one pigment compound comprises a colored pigment compound.

11. A composition as recited in claim 1 wherein said at least one pigment compound comprises a fluorescent colored pigment compound.

12. A composition as recited in claim 1 wherein said at least one pigment compound comprises a white pigment compound.

13. A composition as recited in claim 1 further comprising a plurality of pigment compounds.

14. A composition as recited in claim 1 wherein said at least one filler compound comprises an aluminum silicate compound.

15. A composition as recited in claim 1 wherein said at least one filler compound comprises a calcium carbonate compound.

16. A composition as recited in claim 1 wherein said aqueous paint component further comprises a dispersant.

17. A composition as recited in claim 1 wherein said aqueous paint component further comprises an anti-foaming agent.

18. A composition as recited in claim 1 wherein said aqueous paint component further comprises a surfactant.

19. A composition as recited in claim 1 wherein said aqueous paint component further comprises a bactericide.

20. A composition as recited in claim 1 wherein said aqueous paint component further comprises a light stabilizer.

21. A composition as recited in claim 1 wherein said aqueous propellant component comprises an aqueous dimethyl ether compound.

1 22. A temporary aqueous aerosol paint composition comprising:
2 an aqueous paint component comprising,
3 an aqueous solvent,
4 a polymeric resin,
5 at least one pigment compound,
6 at least one filler compound,
7 a dispersant,
8 an anti-foaming agent,
9 a surfactant, and
10 an aqueous propellant component.

11 23. A composition as recited in claim 22 wherein said aqueous
12 solvent comprises between generally about 50% to 90% by weight
13 of said aqueous paint component.

14 24. A composition as recited in claim 22 wherein said polymeric
15 resin comprises between generally about 5% to 10% by weight of
16 said aqueous paint component.

17 25. A composition as recited in claim 22 wherein said at least
18 one pigment compound comprises between generally about 5% to 25%
19 by weight of said aqueous paint component.

20 26. A composition as recited in claim 22 wherein said at least
21 one filler compound comprises between generally about 1% to 10%
22 by weight of said aqueous paint component.

23 27. A composition as recited in claim 22 wherein said
24 dispersant comprises between generally about 0.10% to 1.00% by
25 weight of said aqueous paint component.

1 28. A composition as recited in claim 22 wherein said anti-
2 foaming agent comprises between generally about 0.10% to 0.50%
3 by weight of said aqueous paint component.

4 29. A composition as recited in claim 22 wherein said
5 surfactant comprises between generally about 0.05% to 1.00% by
6 weight of said aqueous paint component.

7 30. A composition as recited in claim 22 wherein said aqueous
8 paint component further comprises a light stabilizer in an
9 amount of between generally about 0.4% to 0.8% by weight of said
10 aqueous paint component.

11 31. A composition as recited in claim 22 wherein said aqueous
12 paint component further comprises a bactericide comprising
13 between generally about 0.01% to 0.10% by weight.

14 32. A composition as recited in claim 22 wherein said aqueous
15 paint component comprises between generally about 60% to 90% by
16 weight of said composition.

17 33. A composition as recited in claim 22 wherein said aqueous
18 propellant component comprises between generally about 10% to
19 40% by weight of said composition.

20 34. A composition as recited in claim 33 wherein said aqueous
21 propellant component comprises an aqueous dimethyl ether
22 compound.

23 35. A temporary aqueous aerosol paint composition comprising:
24 an aqueous paint component comprising,
25 an aqueous solvent comprising between generally about

1 50% to 90% by weight,
2 a polymeric resin comprising between generally about
3 5% to 10% by weight,
4 at least one pigment compound comprising between
5 generally about 5% to 25% by weight,
6 at least one filler compound comprising between
7 generally about 1% to 10% by weight,
8 a dispersant comprising between generally about 0.10%
9 to 1.00% by weight,
10 an anti-foaming agent comprising between generally
11 about 0.10% to 0.50% by weight,
12 a surfactant comprising between generally about 0.05%
13 to 1.00% by weight,
14 a bactericide comprising between generally about 0.01%
15 to 0.10% by weight, and
16 an aqueous propellant component.

17 36. A composition as recited in claim 35 wherein said aqueous
18 paint component comprises between generally about 60% to 90% by
19 weight of said composition.

20 37. A composition as recited in claim 35 wherein said aqueous
21 paint component further comprises a light stabilizer in an
22 amount of between generally about 0.4% to 0.8% by weight of said
23 aqueous paint component.

24 38. A composition as recited in claim 37 wherein said light
25 stabilizer comprises a polymeric benzotriazole.

1 39. A composition as recited in claim 35 wherein said aqueous
2 propellant component comprises between generally about 10% to
3 40% by weight of said composition.

4 40. A composition as recited in claim 39 wherein said aqueous
5 propellant component comprises an aqueous dimethyl ether
6 compound.

7 41. A composition as recited in claim 35 wherein said aqueous
8 solvent comprises between generally about 60% to 80% by weight
9 of said aqueous paint component, said aqueous solvent comprising
10 an amount of water.

11 42. A composition as recited in claim 35 wherein said polymeric
12 resin comprises generally about 6% by weight of said aqueous
13 paint component, said polymeric resin comprising a polyvinyl
14 acetate dispersion.

15 43. A composition as recited in claim 35 wherein said at least
16 one filler compound comprises generally about 1.7% by weight of
17 said aqueous paint component, said at least one filler
18 comprising an aluminum silicate compound.

19 44. A composition as recited in claim 35 wherein said at least
20 one filler compound comprises generally about 5.1% by weight of
21 said aqueous paint component, said at least one filler
22 comprising an aluminum silicate compound.

23 45. A composition as recited in claim 35 wherein said at least
24 one filler compound comprises generally about 2.1% by weight of
25 said aqueous paint component, said at least one filler compound

1 comprising a calcium carbonate compound.

2 46. A composition as recited in claim 35 wherein said at least
3 one filler compound comprises generally about 6.4% by weight of
4 said aqueous paint component, said at least one filler compound
5 comprising a calcium carbonate compound.

6 47. A composition as recited in claim 35 wherein said anti-
7 foaming agent comprises between generally about 0.20% to 0.30%
8 by weight of said aqueous paint component, said anti-foaming
9 agent comprising an emulsion.

10 48. A composition as recited in claim 35 wherein said
11 dispersant comprises generally about 0.24% by weight of said
12 aqueous paint component, said dispersant comprising a nonionic
13 surfactant.

14 49. A composition as recited in claim 35 wherein said
15 dispersant comprises generally about 0.52% by weight of said
16 aqueous paint component, said dispersant comprising a nonionic
17 surfactant.

18 50. A composition as recited in claim 35 wherein said
19 bactericide comprises generally about 0.03% by weight of said
20 aqueous paint component.

21 51. A composition as recited in claim 50 wherein said
22 bactericide comprises 1,3-dihydroxymethyl-5,5-dimethylhydantoin.

23 52. A temporary aqueous aerosol marking paint composition
24 comprising:

25 an aqueous paint component comprising,

1 an amount of water comprising generally about 72% by
2 weight,

3 a polyvinyl acetate dispersion comprising generally
4 about 6% by weight,

5 a flourescent pink pigment compound comprising
6 generally about 15% by weight,

7 an aluminum silicate compound comprising generally
8 about 2% by weight,

9 a calcium carbonate compound comprising generally
10 about 2% by weight,

11 an anti-foaming agent comprising generally about 0.25%
12 by weight,

13 a light stabilizer comprising generally about 0.6% by
14 weight,

15 a dispersant comprising generally about 0.5% by
16 weight,

17 a surfactant comprising generally about 0.8% by
18 weight,

19 a bactericide comprising generally about 0.03% by
20 weight,

21 an aqueous propellant component comprising an aqueous
22 dimethyl ether compound, and

23 said aqueous propellant component comprising generally
24 about 25% by weight of said composition.

25 53. A temporary aqueous aerosol marking paint composition

1 comprising:

2 an aqueous paint component comprising,

3 an amount of water comprising generally about 72% by
4 weight,

5 a polyvinyl acetate dispersion comprising generally
6 about 6% by weight,

7 a fluorescent red pigment compound comprising
8 generally about 10% by weight,

9 an organic red pigment compound comprising generally
10 about 5% by weight,

11 an aluminum silicate compound comprising generally
12 about 2% by weight,

13 a calcium carbonate compound comprising generally
14 about 2% by weight,

15 an anti-foaming agent comprising generally about 0.25%
16 by weight,

17 a light stabilizer comprising generally about 0.6% by
18 weight,

19 a dispersant comprising generally about 0.5% by
20 weight,

21 a surfactant comprising generally about 0.8% by
22 weight,

23 a bactericide comprising generally about 0.03% by
24 weight,

25 an aqueous propellant component comprising an aqueous

1 dimethyl ether compound, and

2 said aqueous propellant component comprising generally
3 about 25% by weight of said composition.

4 54. A temporary aqueous aerosol marking paint composition
5 comprising:

6 an aqueous paint component comprising,

7 an amount of water comprising generally about 73% by
8 weight,

9 a polyvinyl acetate dispersion comprising generally
10 about 6% by weight,

11 a flourescent orange pigment compound comprising
12 generally about 14% by weight,

13 an aluminum silicate compound comprising generally
14 about 2% by weight,

15 a calcium carbonate compound comprising generally
16 about 2% by weight,

17 an anti-foaming agent comprising generally about 0.25%
18 by weight,

19 a light stabilizer comprising generally about 0.6% by
20 weight,

21 a dispersant comprising generally about 0.5% by
22 weight,

23 a surfactant comprising generally about 0.8% by
24 weight,

25 a bactericide comprising generally about 0.03% by

1 weight,

2 an aqueous propellant component comprising an aqueous
3 dimethyl ether compound, and

4 said aqueous propellant component comprising generally
5 about 25% by weight of said composition.

6 55. A temporary aqueous aerosol marking paint composition
7 comprising:

8 an aqueous paint component comprising,

9 an amount of water comprising generally about 71% by
10 weight,

11 a polyvinyl acetate dispersion comprising generally
12 about 6% by weight,

13 a flourescent green pigment compound comprising
14 generally about 16% by weight,

15 an aluminum silicate compound comprising generally
16 about 2% by weight,

17 a calcium carbonate compound comprising generally
18 about 2% by weight,

19 an anti-foaming agent comprising generally about 0.25%
20 by weight,

21 a light stabilizer comprising generally about 0.6% by
22 weight,

23 a dispersant comprising generally about 0.5% by
24 weight,

25 a surfactant comprising generally about 0.8% by

1 weight,

2 a bactericide comprising generally about 0.03% by
3 weight,

4 an aqueous propellant component comprising an aqueous
5 dimethyl ether compound, and

6 said aqueous propellant component comprising generally
7 about 25% by weight of said composition.

8 56. A temporary aqueous aerosol marking paint composition
9 comprising:

10 an aqueous paint component comprising,

11 an amount of water comprising generally about 78% by
12 weight,

13 a polyvinyl acetate dispersion comprising generally
14 about 6% by weight,

15 a fluorescent blue pigment compound comprising
16 generally about 9% by weight,

17 an aluminum silicate compound comprising generally
18 about 2% by weight,

19 a calcium carbonate compound comprising generally
20 about 2% by weight,

21 an anti-foaming agent comprising generally about 0.25%
22 by weight,

23 a light stabilizer comprising generally about 0.6% by
24 weight,

25 a dispersant comprising generally about 0.5% by

1 weight,

2 a surfactant comprising generally about 0.8% by
3 weight,

4 a bactericide comprising generally about 0.03% by
5 weight,

6 an aqueous propellant component comprising an aqueous
7 dimethyl ether compound, and

8 said aqueous propellant component comprising generally
9 about 25% by weight of said composition.

10 57. A temporary aqueous aerosol marking paint composition
11 comprising:

12 an aqueous paint component comprising,

13 an amount of water comprising generally about 70% by
14 weight,

15 a polyvinyl acetate dispersion comprising generally
16 about 6% by weight,

17 a fluorescent yellow pigment compound comprising
18 generally about 17% by weight,

19 an aluminum silicate compound comprising generally
20 about 2% by weight,

21 a calcium carbonate compound comprising generally
22 about 2% by weight,

23 an anti-foaming agent comprising generally about 0.25%
24 by weight,

25 a light stabilizer comprising generally about 0.6% by

weight,

a dispersant comprising generally about 0.5% by weight,

a surfactant comprising generally about 0.8% by weight,

a bactericide comprising generally about 0.03% by weight,

an aqueous propellant component comprising an aqueous dimethyl ether compound, and

said aqueous propellant component comprising generally about 25% by weight of said composition.

58. A temporary aqueous aerosol marking paint composition comprising:

an aqueous paint component comprising,

an amount of water comprising generally about 63% by weight,

a polyvinyl acetate dispersion comprising generally about 6% by weight,

a white pigment compound comprising generally about 18% by weight,

an aluminum silicate compound comprising generally about 5% by weight,

a calcium carbonate compound comprising generally about 6% by weight,

an anti-foaming agent comprising generally about 0.23%

1 by weight,

2 a dispersant comprising generally about 0.25% by
3 weight,

4 a surfactant comprising generally about 0.1% by
5 weight,

6 a bactericide comprising generally about 0.03% by
7 weight,

8 an aqueous propellant component comprising an aqueous
9 dimethyl ether compound, and

10 said aqueous propellant component comprising generally
11 about 25% by weight of said composition.

12 59. A method for preparing an aqueous paint component for a
13 temporary aqueous aerosol paint composition, comprising:

14 charging a reaction vessel with an initial amount of an
15 aqueous solvent,

16 setting a primary mixing cycle for the contents of the
17 reaction vessel,

18 adding at least one pigment compound to the reaction
19 vessel,

20 adding an additional amount of the aqueous solvent to the
21 reaction vessel,

22 setting a high velocity mixing cycle for the contents of
23 the reaction vessel,

24 adding at least one filler compound to the reaction vessel,
25 setting a first low velocity mixing cycle for the contents

1 of the reaction vessel,

2 adding a polymeric resin to the reaction vessel,

3 setting a second low velocity mixing cycle for the contents
4 of the reaction vessel, and

5 adding a final amount of the aqueous solvent to the
6 reaction vessel.

7 60. A method as recited in claim 59 further comprising adding
8 a dispersant to the reaction vessel.

9 61. A method as recited in claim 59 further comprising adding
10 an anti-foaming agent to the reaction vessel.

11 62. A method as recited in claim 59 further comprising adding
12 a surfactant to the reaction vessel.

13 63. A method as recited in claim 59 further comprising adding
14 a bactericide to the reaction vessel.

15 64. A method as recited in claim 59 further comprising adding
16 a light stabilizer to the reaction vessel.

17 65. A method as recited in claim 59 wherein charging the
18 initial amount of aqueous solvent comprises adding generally
19 about 20% by weight of a total amount of aqueous solvent into
20 the reaction vessel.

21 66. A method as recited in claim 59 wherein adding the
22 additional amount of aqueous solvent comprises adding generally
23 about 10% by weight of a total amount of aqueous solvent into
24 the reaction vessel.

25 67. A method as recited in claim 59 wherein adding the final

1 amount of aqueous solvent comprises adding generally about 70%
2 by weight of a total amount of aqueous solvent into the reaction
3 vessel.

4 68. A method as recited in claim 59 wherein setting the primary
5 mixing cycle comprises adjusting the mixing speed to
6 approximately 1,800 rpm and maintaining the mixing speed at
7 approximately 1,800 rpm for between generally about 10 to 15
8 minutes.

9 69. A method as recited in claim 59 wherein setting the high
10 velocity mixing cycle comprises adjusting the mixing speed to
11 approximately 2,300 rpm and maintaining the mixing speed at
12 approximately 2,300 rpm for generally about 60 minutes.

13 70. A method as recited in claim 59 wherein setting the first
14 low velocity mixing cycle comprises adjusting the mixing speed
15 to approximately 800 rpm and maintaining the mixing speed at
16 approximately 800 rpm for between generally about 5 to 10
17 minutes.

18 71. A method as recited in claim 59 wherein setting the second
19 low velocity mixing cycle comprises adjusting the mixing speed
20 to approximately 600 rpm and maintaining the mixing speed at
21 approximately 600 rpm between generally about 10 to 15 minutes.

22 72. A method for preparing a temporary aqueous aerosol paint
23 composition, comprising:

24 charging a reaction vessel with an initial amount of an
25 aqueous solvent comprising generally about 20% by weight of a

1 total amount of aqueous solvent to be added to the reaction
2 vessel, and the total amount of aqueous solvent comprises
3 between generally about 50% to 90% by weight of an aqueous paint
4 component,

5 setting a primary mixing cycle for the contents of the
6 reaction vessel comprising adjusting a mixing speed to
7 approximately 1,800 rpm and maintaining the mixing speed at
8 approximately 1,800 rpm between generally about 10 to 15
9 minutes,

10 adding at least one pigment compound comprising between
11 generally about 5% to 25% by weight of the aqueous paint
12 component to the reaction vessel,

13 adding an additional amount of the aqueous solvent
14 comprising generally about 10% by weight of the total amount of
15 aqueous solvent to the reaction vessel,

16 adding a dispersant comprising between generally about
17 0.10% to 1.00% by weight of the aqueous paint component to the
18 reaction vessel,

19 setting a high velocity mixing cycle for the contents of
20 the reaction vessel comprising adjusting the mixing speed to
21 approximately 2,300 rpm and maintaining the mixing speed at
22 approximately 2,300 rpm for generally about 60 minutes,

23 adding a plurality of filler compounds each comprising
24 between generally about 1% to 10% by weight of the aqueous paint
25 component to the reaction vessel,

1 setting a first low velocity mixing cycle for the contents
2 of the reaction vessel comprising adjusting the mixing speed to
3 approximately 800 rpm and maintaining the mixing speed at
4 approximately 800 rpm between generally about 5 to 10 minutes,

5 adding an anti-foaming agent comprising between generally
6 about 0.10% to 0.50% by weight of the aqueous paint component to
7 the reaction vessel,

8 adding a surfactant comprising between generally about
9 0.05% to 1.00% by weight of the aqueous paint component to the
10 reaction vessel,

11 adding a bactericide comprising between generally about
12 0.01% to 0.10% by weight of the aqueous paint component to the
13 reaction vessel,

14 adding a polymeric resin comprising between generally about
15 5% to 10% by weight of the aqueous paint component to the
16 reaction vessel,

17 setting a second low velocity mixing cycle for the contents
18 of the reaction vessel comprising adjusting the mixing speed to
19 approximately 600 rpm and maintaining the mixing speed at
20 approximately 600 rpm between generally about 10 to 15 minutes,

21 adding a final amount of the aqueous solvent comprising
22 generally about 70% by weight of the total amount of the aqueous
23 solvent to the reaction vessel,

24 charging an aerosol can with an amount of the aqueous paint
25 component, the aqueous paint component comprising generally

1 about 75% by weight of the aqueous aerosol paint composition,
2 and

3 charging the aerosol can with an amount of an aqueous
4 propellant component, the aqueous propellant component
5 comprising generally about 25% by weight of the aqueous aerosol
6 paint composition.